

UNITED STATES OF AMERICA  
POSTAL REGULATORY COMMISSION  
WASHINGTON, DC 20268-0001

Before Commissioners:

Robert G. Taub, Chairman;  
Michael Kubayanda, Vice Chairman;  
Mark Acton;  
Ann C. Fisher; and  
Ashley E. Poling

Periodic Reporting  
(Proposal Two)

Docket No. RM2020-7

ORDER ON ANALYTICAL PRINCIPLES USED IN PERIODIC REPORTING  
(PROPOSAL TWO)

(Issued July 9, 2020)

I. INTRODUCTION

On April 7, 2020, the Postal Service filed a petition pursuant to 39 C.F.R. § 3050.11 requesting the Commission to initiate a rulemaking proceeding to consider changes to analytical principles relating to periodic reports.<sup>1</sup> The Postal Service proposes a methodology for updating the city carrier regular delivery time variabilities

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<sup>1</sup> Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposal Two), April 7, 2020 (Petition). Attached to the proposal is a report, "A Methodology for Updating the City Carrier Regular Delivery Variables, April 7, 2020," prepared by Professor Michael D. Bradley (Bradley Report). The Postal Service also filed public and non-public materials relating to Proposal Two. See Notice of Filing of USPS-RM2020-7-1 and USPS-RM2020-7-NP1 and Application for Nonpublic Treatment, April 7, 2020. The Postal Service provided minor revisions to materials relating to Proposal Two. See Notice of the United States Postal Service of Minor Revisions to Proposal Two Materials – Errata, April 14, 2020; Notice of the United States Postal Service of Revisions to USPS-RM2020-7-1 – Errata, April 14, 2020.

annually, so that they reflect changes in relative volumes. Petition, Proposal Two at 1. The Petition identifies the proposed analytical changes filed in this docket as Proposal Two. For the reasons given below, the Commission approves Proposal Two.

## II. PROCEDURAL HISTORY

On April 19, 2020, the Commission issued a notice establishing this proceeding, inviting comments on Proposal Two, and appointing a Public Representative.<sup>2</sup> To assist the Commission in its evaluation of the Postal Service's proposal, Chairman's Information Request No. 1 was issued on April 14, 2020.<sup>3</sup> The Postal Service responded to CHIR No. 1 on April 15, 2020.<sup>4</sup>

The Public Representative filed a series of motions seeking the issuance of additional information requests.<sup>5</sup> On April 21, 2020, Chairman's Information Request No. 2 was issued,<sup>6</sup> and on April 27, 2020, the Postal Service submitted its responses.<sup>7</sup> On April 28, 2020, Chairman's Information Request No. 3 was issued,<sup>8</sup> and on May 4, 2020, the Postal Service filed responses.<sup>9</sup> On May 12, 2020, Chairman's Information

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<sup>2</sup> Notice of Proposed Rulemaking on Analytical Principles Used in Periodic Reporting (Proposal Two), April 9, 2020 (Order No. 5478).

<sup>3</sup> Chairman's Information Request No. 1, April 14, 2020 (CHIR No. 1).

<sup>4</sup> Responses of the United States Postal Service to Questions 1-4 of Chairman's Information Request No. 1, April 15, 2020 (Response to CHIR No. 1).

<sup>5</sup> Public Representative Motion for Issuance of Information Request, April 16, 2020; Public Representative Second Motion for Issuance of Information Request, April 24, 2020; and Public Representative Third Motion for Issuance of Information Request, May 4, 2020.

<sup>6</sup> Chairman's Information Request No. 2, April 21, 2020 (CHIR No. 2).

<sup>7</sup> Responses of the United States Postal Service to Questions 1-2 of Chairman's Information Request No. 2, April 27, 2020 (Response to CHIR No. 2).

<sup>8</sup> Chairman's Information Request No. 3, April 28, 2020 (CHIR No. 3).

<sup>9</sup> Responses of the United States Postal Service to Questions 1-3 of Chairman's Information Request No. 3, May 4, 2020 (Response to CHIR No. 3).

Request No. 4 was issued,<sup>10</sup> and on May 15, 2020, the Postal Service submitted its responses.<sup>11</sup>

On May 22, 2020, the Commission received initial comments from the Public Representative.<sup>12</sup> No other initial comments were filed. On May 29, 2020, the Postal Service filed reply comments<sup>13</sup> together with a motion for leave to file those comments.<sup>14</sup>

### III. BACKGROUND

The Postal Service currently calculates unit delivery costs by rate category to provide insight into the nature of those costs at a detailed level. Petition, Proposal Two at 1. Those costs are calculated within delivery cost models, which are presented in a library reference filed with the Postal Service's Annual Compliance Report.<sup>15</sup> Unit delivery costs for relevant mail products are disaggregated into "costs for flats delivered in [Flats Sequencing System (FSS)] zones and flats delivered in non-FSS zones." Bradley Report at 1.

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<sup>10</sup> Chairman's Information Request No. 4, May 12, 2020 (CHIR No. 4).

<sup>11</sup> Responses of the United States Postal Service to Questions 1-2 of Chairman's Information Request No. 4, May 15, 2020 (Response to CHIR No. 4).

<sup>12</sup> Public Representative Comments on Proposal Two, May 22, 2020 (PR Comments). The Public Representative also filed non-public materials in support of his comments. See Public Representative Notice of Filing Non-Public Library Reference RM2020-7-PR-NP-1, May 22, 2020. In addition the Public Representative filed a notice of an erratum. See Notice of Erratum, May 26, 2020 (PR Erratum).

<sup>13</sup> Reply Comments of the United States Postal Service Regarding Proposal Two, May 29, 2020 (Postal Service Reply Comments). The Postal Service filed two public worksheets in support of its comments. See Excel files "FSS Model FY19.PR Replication.xlsx" and "FSS Model FY19.Unit CostByFunction.xlsx."

<sup>14</sup> Motion of the United States Postal Service for Leave to File Reply Comments Regarding Proposal Two, May 29, 2020 (Motion). No responses in opposition were filed. The Commission hereby grants the Motion.

<sup>15</sup> Bradley Report at 1. See Docket No. ACR2019, Library Reference USPS-FY19-19, December 27, 2019.

The Commission previously approved the methodology for disaggregating delivery costs for Periodicals flats, Bound Printed Matter Flats, USPS Marketing Mail Flats, and Carrier Route Flats between those destinating in FSS ZIP Codes and non-FSS ZIP Codes.<sup>16</sup> Delivery costs are further disaggregated “into their rural carrier and city carrier components.” Bradley Report at 1. In addition, for city carriers, “costs are separately calculated for office time and street time.” *Id.* A recent review of those costs revealed large differences between the Postal Service’s street time unit delivery costs for flats in FSS and non-FSS zones. *Id.* The Postal Service found this gap surprising because it did not exist for the marginal times on which the costs were based. Petition, Proposal Two at 1.

The Postal Service states that its investigation of the observed gap revealed that the ratio of attributable costs for FSS and non-FSS flats is very different from the corresponding ratios of volumes. *Id.* The Postal Service traced the source of this discrepancy to the fact that the volume proportions from the City Carrier Street Time Study (CCSTS) data collected in FY 2013, and used in the established model, do not match the current volume proportions.<sup>17</sup>

The shift in volume proportions has implications for calculated unit delivery costs because city carrier street time variabilities depend upon the volumes used to calculate them.<sup>18</sup> The Postal Service asserts that a failure to account for volume changes can

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<sup>16</sup> Response to CHIR No. 1, question 1. The Postal Service explains that the split between FSS and non-FSS zones (ZIP Codes) is based on the methodology approved by the Commission in Docket No. RM2015-16 and embodied in the Library Reference PRC-LR-RM2015-16/1. *Id.* See Docket No. RM2015-16, Order Approving Analytical Principles Used in Periodic Reporting (Proposal Seven), November 25, 2015, at 11 (Order No. 2839). See *also* Docket No. RM2015-16, Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Changes in Analytical Principles (Proposal Seven), August 5, 2015, Section Two at 3-12, 14-16.

<sup>17</sup> Petition, Proposal Two at 2. See Bradley Report at 2-3. The established model was approved by the Commission in Docket No. RM2015-7. *Id.* See Docket No. RM2015-7, Order Approving Analytical Principles Used in Periodic Reporting (Proposal Thirteen), October 29, 2015 (Order No. 2792).

<sup>18</sup> Petition, Proposal Two at 2. The volume proportions are calculated between four types of delivery volumes included in the city carrier regular delivery time equation of the established model. The four types of delivery volumes are: delivery point sequence (DPS) mail, cased mail, sequenced mail, and FSS mail. Response to CHIR No. 2, question 1c.

lead to the calculation of inappropriate variabilities. Petition, Proposal Two at 2. For example, if a particular type of mail experiences a volume decline and the current variability calculation does not account for that decline, the volume variable cost for this type of mail will be higher than it should be, leading to high calculated unit costs. *Id.* at 2-3.

In addition, the estimated variabilities determine the size of the activity cost pools for city carrier street time. Bradley Report at 4. The Postal Service notes that in Docket No. RM2017-8, the Commission approved a methodology proposed by the Postal Service for annually updating the parcel and accountable activity cost pools for city carriers in order to reflect increasing parcel volumes.<sup>19</sup>

#### IV. SUMMARY OF PROPOSAL TWO

##### A. Methodology

Proposal Two provides a methodology for annually updating the variabilities for city carrier regular letter and flat street delivery time to reflect changes in the relative volumes of letter and flat mail. Petition, Proposal Two at 1; Bradley Report at 5. Updating the variabilities to reflect the current relative volumes of letter and flat mail “has the effect of updating the relevant activity cost pools.” Bradley Report at 4.

The individual city carrier delivery activity cost pools for different types of delivered mail, like DPS or FSS mail, are calculated by multiplying the actual accrued regular delivery time cost by the relevant variabilities, which are currently estimated from the established model approved in Docket No. RM2015-7. *Id.* at 4-5, 7. For each delivery activity cost pool, the street time variability has three parts: the marginal time for this activity (the type of mail), the volume for this type of mail, and the total regular delivery time. *Id.* at 7. Any of these three parts can change when volume changes. *Id.*

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<sup>19</sup> *Id.* See Docket No. RM2017-8, Order on Analytical Principles Used In Periodic Reporting (Proposal Four), December 1, 2017 (Order No. 4259).

In updating variability, the approach underlying Proposal Two “allows for responses in all three parts due to a volume change.” *Id.*

The marginal times and variabilities are currently calculated using the estimated coefficients from the regular delivery regression equation in the established city carrier street model approved by the Commission in Order No. 2792.<sup>20</sup> Since regular delivery time is the dependent variable in the regular delivery regression equation, total regular delivery time is also calculated from this equation. Bradley Report at 5-6.

Although the mean volumes used to compute the regular delivery time variabilities (elasticities) are typically calculated directly from the CCSTS dataset, it is possible to “derive the mean volumes as proportions of the total average letter and flat delivered volume” and thereby facilitate an update of the calculated variabilities. *Id.* at 8. The letter and flat delivered volume is the sum of the volumes of four components (mail shapes) for which delivery variabilities are calculated: DPS mail, cased mail, sequenced mail, and FSS mail. Petition, Proposal Two at 4-5. For that reason, the average volume for any component can be calculated “by multiplying the component’s proportion of total letter and flat delivery volume by the overall average volume.” *Id.* at 4.

Proposal Two puts forward a methodology to update the regular delivery time variabilities using more recent volume means that are calculated “by forming the needed volume proportions with the more recent data, here the FY 2019 [City Carrier Cost System] CCCS volumes.” *Id.* at 5 (footnote omitted). This approach “keeps the total letter and flat volumes the same [as they were in the original city carrier regular delivery time equation] and only changes the relative proportions [between letter and flat volumes], to reflect current volume patterns.” Bradley Report at 9. The proposed methodology would be used annually to update volume means, which, in turn, would

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<sup>20</sup> See Bradley Report at 5-6. See also Order No. 2792 at 1, 4 n.5, 9-12, Docket No. RM2015-7, Library Reference USPS-RM2015-7/1, December 11, 2014, folder “Letter\_Route\_Report,” file “City Carrier Street Time Study Report.pdf” at 74 (CCSTS Report).

make it possible to update the delivery marginal times and variabilities.<sup>21</sup> There is, however, one exception, which is related to the volumes collected from customers' receptacles, which are also included in the city carrier regular delivery time regression equation. The Postal Service maintains that due to the lack of recent operational data on these mail volumes, it is unable to update their volume means. Bradley Report at 8, n.9.

#### B. Impact

The Postal Service recalculates the regular delivery variabilities using the FY 2019 CCCS volume proportions. Petition, Proposal Two at 6. A comparison between current and new variabilities reveals that for both DPS mail and cased mail, the new variabilities are approximately 0.5 percent higher than the current variabilities. *Id.* at 6, Table 3. By contrast, the new variabilities for sequenced mail and FSS flats are lower than the current ones by 1.0 percent and 1.1 percent, respectively. *Id.*

To determine if a recalculation of variabilities using current volume proportions mitigates the gap between FSS and non-FSS unit city carrier street time costs, the Postal Service compares "the FSS and cased mail flats volume variable delivery time costs for FY 2019 using [both] the old variabilities and...the new variabilities." Bradley Report at 13-14. This comparison shows that the updated variabilities increase the city carrier cased mail street costs slightly and materially decrease the city carrier FSS flats costs. *Id.* at 14. This, in turn, reduces the gap between FSS and non-FSS unit street time costs for flats. *Id.* at 14-15. The reduction is in a range between 2.5 cents and almost 4.0 cents, depending on the mail component. See *id.* at 15, 16, Table 7. A comparison of city carrier unit street time costs for FSS and non-FSS flats using FY 2013 CCSTS volumes and FY 2019 CCCS volumes is presented in Table IV-1

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<sup>21</sup> Petition, Proposal Two at 3-6; Bradley Report at 9-12. For calculation of new volume means, marginal times and variabilities, see Library Reference USPS-RM2020-7-1, April 7, 2020, folder "Calculating Updated Variabilities."

**Table IV-1**  
**City Carrier Unit Street Time Costs for FSS and Non-FSS Flats**

	FY 2019 City Carrier Unit Street Time Costs (\$) Based on:					
Flats Category	FY 2013 CCSTS Volumes (1)			FY 2019 CCCS Volumes (2)		
	FSS Flats	Non-FSS Flats	Difference	FSS Flats	Non-FSS Flats	Difference
Periodicals Flats	0.1069	0.0316	0.0753	0.712	0.342	0.0371
Bound Printed Matter Flats	0.0764	0.0453	0.0311	0.540	0.477	0.0063
USPS Marketing Mail Flats	0.1105	0.0325	0.0780	0.729	0.347	0.0383
Carrier Routes Flats	0.1072	0.0382	0.0690	0.711	0.400	0.0311

Source: (1) Docket No. ACR2019, Library Reference USPS-FY19-19, December 27, 2019, folder "Delivery Model Files," Excel file "FSSDeliveryModel19.xlsx (FSS Delivery Model), tab "Summary," column L; (2) Library Reference USPS-RM2020-7-1, Revised April 14, 2020, folder "Calculated Updated Unit Flats Costs," Excel file "FSSDeliveryModel19.New v2.xlsx," tab "Summary," column L, New FSS Delivery Model.

The updated variabilities also result in changes in the unit volume variable city carrier costs for nearly all products. Petition, Proposal Two at 8. For all but one of the domestic market dominant mail products, the changes in unit volume variable costs are in a range between -0.9 cents and 0.1 cents. *Id.* at 10. The largest impact of Proposal Two on unit volume variable costs is observed for High Density and Saturation Flats and Parcels, for which unit costs fall by 1.2 cents. *Id.* at 9-10. For domestic competitive mail products and services, Proposal Two results in a decrease of unit volume variable costs by 0.2 cents on average. *Id.* at 10.

## V. COMMENTS

### A. Public Representative Comments

The Public Representative supports the update of city carrier variabilities as timely. PR Comments at 1. He commends the Postal Service for developing "an easy and accurate method to update" the regular delivery variabilities and notes that this method "is relatively simple" to implement. *Id.* at 1, 9.

Although he supports the update of city carrier variabilities, the Public Representative "takes issue with the Postal Service's stated motivation" for the

updating. *Id.* at 1. He argues that the Postal Service “incorrectly included costs of special purpose routes, blue box collection and delivery support costs in its estimates of unit costs of mail destinating in FSS and Non-FSS Zones” and that, by including these costs, the Postal Service “does not fully succeed in justifying the need to update regular city carrier delivery variabilities.” See *id.* at 1, 6. Despite his rejection of the Postal Service’s stated motivation for updating city carrier variabilities, he submits that “it is sufficient to update city carrier variabilities when relative volume shares notably change, and agrees they should be updated.” *Id.* at 2, 8-9.

The Public Representative also argues that the Postal Service’s method for updating variabilities would be further improved if annual collection volume estimates were included in the calculation of the volume proportions. *Id.* at 2, 11. He offers an alternative method for updating variabilities, which, he asserts, is very similar to the method proposed by the Postal Service, but is extended to also update the mean for collection mail, and the relevant variability and marginal times using data from the CCCS.<sup>22</sup> The Public Representative maintains that his method is “marginally superior” to the Postal Service’s method, although the estimated variabilities, marginal times, and product unit costs are just slightly different. PR Comments at 12, 16-17.

Finally, the Public Representative recommends directly updating the mean values of the explanatory variables and the control variables used in the regular delivery model approved in Docket No. RM2015-7. *Id.* at 19. He states, “[t]he means could be updated using [the ZIP-Code-day data in the expanded dataset] provided by the Postal Service’s response to Interim Order No. 4869” in Docket No. RM2017-1.<sup>23</sup> He

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<sup>22</sup> *Id.* at 11-15. See Library Reference RM2020-7-PR-NP-1, May 22, 2020, subfolders “RM2020-7-PR-NP-LR-1” and “FSS Delivery Model and Means Calcs,” Excel file “Means\_SumsRatios.Final.”

<sup>23</sup> *Id.* at 19-20. The Public Representative refers to the data provided in Docket No. PI2017-1, in four Library References (USPS-PI2017-1/NP2 filed on July 31, 2019, USPS-PI2017-1/NP3, filed October 24, 2019, USPS-PI2017-1/NP4, filed on January 22, 2020, and USPS-PI2017-1/NP5, filed on February 27, 2020. The data was provided in response to Docket No. PI2017-1, Interim Order, November 2, 2018 (Order No. 4869).

maintains that by implementing such an update it would be possible to capture many changes in operational conditions. PR Comments at 19.

B. Postal Service Reply Comments

In its reply comments, the Postal Service discusses its motivations for the initiation of Proposal Two and disputes the Public Representative's suggestion that certain costs, which he characterizes as "non-delivery" costs, "could be contaminating the comparison of unit street time costs between FSS and non-FSS zones." Postal Service Reply Comments at 3 (footnote omitted). The Postal Service states that the share of these costs in the overall city carrier street costs is very small and removing these costs from the calculation of unit street costs "will not make the changes in the ratio of FSS to non-FSS costs that the [Public Representative] found." Postal Service Comments at 3-5.

The Postal Service also investigates the Public Representative's calculations that purport to show the impact of the "non-delivery" costs on the ratio of FSS to non-FSS costs and concludes that the concern over the inclusion of these costs is based upon computational errors. *Id.* at 5-6. Correcting for these alleged errors, the Postal Service recalculates unit city carrier delivery costs without those costs, which the Public Representative characterized as not part of the Regular Delivery Cost Pool. *Id.* at 7. The Postal Service asserts that the results of its recalculation using the Public Representative's definition of "delivery costs" are "virtually the same as the ratios for all street time costs implied by...the Bradley Report." *Id.* (footnote omitted). The Postal Service contends that this outcome "strengthens the original Postal Service position." *Id.* at 2.

The Postal Service also opposes the Public Representative's proposed modification of Proposal Two that would use CCCS collection volumes to update the means for volumes collected from customers' receptacles. *Id.* at 2, 8-11. The Postal Service maintains that the provided modification "would not make a material difference

in the calculated city carrier [unit] delivery costs,” but it still “runs the risk of inserting unknown error into the calculation of updated product costs.” *Id.* at 2, 10-11.

## VI. COMMISSION ANALYSIS

### A. Overview

As part of its review of Proposal Two and in response to the Public Representative’s and Postal Service’s comments, the Commission specifically examines the Postal Service’s rationale for Proposal Two, the reliability of the proposed methodology, the Postal Service’s rationale for not updating volume means for mail collected from customers’ receptacles, and the impact of Proposal Two. The Commission concludes that the changes presented in Proposal Two improve the accuracy of data, and it therefore approves the proposed changes.

### B. Rationale for Proposal Two

The impetus for Proposal Two was the Postal Service’s discovery of a discrepancy between unit street time delivery costs for flats delivered in FSS and non-FSS zones. Petition, Proposal Two at 1. As an example, the Postal Service cites Periodicals flats for which unit street time costs were 3.38 times higher in FSS zones than in non-FSS zones. *Id.* The Postal Service finds this discrepancy to be surprising because it does not exist for the marginal time on which the unit street time costs are based. *Id.*

The Public Representative takes the position that the noted discrepancy between the unit delivery costs for flat products destinating in FSS and non-FSS zones is flawed and fails to justify an update of regular city carrier delivery variabilities. PR Comments at 6-8. He bases his position on the argument that certain costs should be excluded from the calculation prior to a delivery cost comparison because these costs are for activities that do not “determine regular city carrier regular shape delivery variabilities.” *Id.* at 7. He concludes that the exclusion of the “SPR [Special Purpose Route], regular

Delivery Support [and] Blue Box Collection costs” would significantly mitigate the gap between unit delivery costs in FSS and non-FSS zones. *Id.* at 7-8.

The Commission agrees with the Public Representative that because city carrier street time costs are developed separately in two distinct groups – the SPR and letter routes,<sup>24</sup> the SPR activities do not determine variabilities in the regular delivery model. However, as correctly pointed out by the Postal Service, “[t]he costs associated with SPR delivery...contribute virtually nothing to the unit costs for the types of mail being analyzed.”<sup>25</sup> The data from the FSS Delivery Model show that the same conclusion is true for the costs for letter route general collections (regular collection points),<sup>26</sup> and the costs associated with delivery of accountables and in-receptacle parcels.<sup>27</sup> The Commission agrees with the Postal Service that removal of certain costs from the calculation of unit costs would not materially change the ratios between unit costs for FSS and non-FSS flats. Postal Service Reply Comments at 5-6.

Table VI-1 provides a comparison between street time unit costs calculated by the Postal Service in Proposal Two and letter routes’ letter and flats delivery unit costs calculated using an approach that removes the costs suggested by the Public Representative and the cost associated with delivery of in-receptacle parcels and accountables from the calculations.

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<sup>24</sup> See 39 C.F.R. § 3050.60(f); See *also* Rule 39 C.F.R. Section 3050.60(f) Report for FY 2018 (Summary Descriptions), July 1, 2019, subfolders “SummaryDescriptions2018,” “CRA.Summary.Description.FY18,” Word file “CS07-18.docx,” at 7.1, available at: [www.prc.gov](http://www.prc.gov).

<sup>25</sup> Postal Service Reply Comments at 4. For details see FSS Delivery Model, tab “City\_Calcs,” columns P, Q.

<sup>26</sup> See FSS Delivery Model, tab “City\_Calcs,” column K. The Public Representative most likely characterized these costs as Blue Box Collection costs.

<sup>27</sup> See FSS Delivery Model, tab “City\_Calcs,” columns I, L. Although the Public Representative does not propose removing in-receptacle parcels and accountables delivery costs from the calculation of regular letter and flat delivery unit costs, the exclusion of such costs would be reasonable because variabilities for in-receptacle parcels and accountables are currently estimated in the separate models (In-receptacle Parcel Model and Deviation Parcel/Accountable Model, respectively). See Order No. 2792 at 12-15; CCSTS Report at 85-104.

**Table VI-1**  
**Current FY 2019 City Carrier Street Time Total and Letter Routes' Regular Delivery Unit Costs (\$)**

Flats Category	City Carrier Street Time Unit Costs (1)			City Carrier Letter Routes' Delivery Unit Costs (2)		
	FSS Zones	Non-FSS Zones	Ratio	FSS Zones	Non-FSS Zones	Ratio
Periodicals Flats	0.1069	0.0316	3.38	0.0972	0.0287	3.39
Bound Printed Matter Flats	0.0764	0.0453	1.69	0.0662	0.0378	1.75
USPS Marketing Mail Flats	0.1105	0.0325	3.40	0.1003	0.0294	3.41
Carrier Route Flats	0.1072	0.0382	2.81	0.0975	0.0348	2.80

Source: (1) FSS Delivery Model, tab "Summary," column L. The city carrier street time costs for both letter routes and SPR activities are used in calculations. All delivery activities support costs are also included in calculation. Costs for letter route delivery activities used in calculations include letter route delivery costs for DPS mail, cased mail, and FSS flats mail; letter route delivery costs for in-receptacle parcels and accountables; letter route costs for collection from customer receptacles and regular collection points; (2) FSS Delivery Model, tab "Summary," column L, tab "City\_Calc," columns F-H, J. The city carrier letter route delivery unit costs are calculated based on the costs for letter route delivery activities only, including letter route delivery costs for DPS mail, cased mail, and FSS flats mail, as well as letter route costs for mail collected from customer receptacles.

This comparison demonstrates that the ratios between city carrier regular delivery street time unit costs for flats products destinating in FSS and non-FSS zones are consistent with the relevant city carrier street time unit cost ratios directly derived from the FY 2019 FSS Delivery Model. The Commission concludes that the Postal Service's motivation for updating city carrier variabilities is reasonable.

The Postal Service determined the source of the discrepancy between unit street time delivery costs for flats destinating in FSS and non-FSS zones to be that "the volume proportions from the City Carrier Street Time Study (CCSTS) data collected in FY 2013, and used in the established model, do not match the current volume proportions." Petition, Proposal Two at 2. Table VI-2 provides a comparison between the currently used FY 2013 CCSTS volume proportions of letter and flat mail delivered by city carriers and the new FY 2019 CCCS volume proportions.

**Table VI-2**  
**FY 2013 CCSTS and FY 2019 CCCS Proportions of Letter and Flat Mail by Shape**

Shape	FY 2013 CCSTS Proportions (1)	FY 2019 CCCS Proportions (2)
DPS Mail	65.00%	70.54%
Cased Mail	20.06%	19.99%
Sequenced Mail	10.40%	6.65%
FSS Mail	4.54%	2.81%
All	100%	100%

Source: Library Reference USPS-RM2020-7-1, folder "Calculating Updated Variabilities," Excel file "Calculating Means Based upon FY 2019 Data," tab "Sheet 1," cells M12-15. For details see (1) CCSTS Report at 53, Table 23, column Mean, rows "DPS," "Cased Mail," "Sequenced" and "FSS;" (2) Docket No. ACR2019, Library Reference USPS-FY19-32, subfolders "usps-fy19-32.files" and "B Workpapers," Excel file "CS06&7-Public-FY19.xlsx," tab "7.0.8," cells F56-H56, J56.

The Postal Service asserts that the shift in volume proportions "can lead to the calculation of inappropriate variabilities" and "create the need for a process of updating the regular delivery activity cost pools." Petition, Proposal Two at 2-3. Pending a re-estimation of the variability equation currently under consideration in Docket No. PI2017-1, "the accuracy of unit volume variable costs can be improved by adjusting the variabilities to reflect current relative volume proportions." Bradley Report at 7 (footnote omitted). Proposal Two would make such an interim adjustment.

Although the Public Representative questions the Postal Service's justification for updating city carrier variabilities, he agrees that notable changes in relative mail volume shares are a sufficient reason to update city carrier variabilities. PR Comments at 2. The Commission agrees with the Postal Service and the Public Representative that it is important to update the volume city carrier regular delivery time variabilities to ensure they reflect changes in relative volumes.

### C. The Methodology for Updating the Means for Delivery Volume Variables

The explanatory variables used in the established city carrier regular delivery time econometric model include four delivery volume variables: DPS mail, cased mail, sequenced mail, and FSS mail. Bradley Report at 5. The total letter and flat delivered

volume is the sum of the volumes for these four components (mail shapes). *Id.* at 8. The average (mean) volume for each of these four variables is currently calculated directly from the FY 2013 CCSTS dataset by multiplying the relevant proportion of the total delivered mail volume by the overall average delivered mail volume.<sup>28</sup>

As discussed in Section VI.B., the proportions of each of the four components of the city carrier delivered mail volume has changed since FY 2013, the year in which the CCSTS dataset was developed. See Petition, Proposal Two at 3.

The most comprehensive approach to addressing this would be to re-estimate the regular delivery econometric model. Bradley Report at 7. This task is, however, “complex and time-consuming.” *Id.* The Postal Service’s progress in the ongoing efforts to update its city carrier cost models is currently being monitored by the Commission in Docket No. PI2017-1. See Order No. 4869. The Commission agrees with the Postal Service that, in the meantime, it is appropriate to re-estimate the city carrier street time regular delivery model variabilities with new volume proportions.

In Docket No. RM2015-7, the estimates for each of the four delivery volume variables were obtained from the Delivery Operations Information System (DOIS), the Postal Service’s “ongoing data system.” Response to CHIR No. 4, question 1.b. The Commission has previously characterized DOIS as a database that “provides comprehensive and accurate volume information for each route on a national and daily basis” for all four shapes of delivered mail. Order No. 2792 at 2, 51. In Proposal Two, the Postal Service utilizes the CCCS data to update volume proportions for delivered mail, and it is therefore important to ensure the consistency of volume data retrieved from DOIS and CCCS.

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<sup>28</sup> *Id.* For the SAS program, see Docket No. RM2015-7, Library Reference USPS-RM2015-7/1, subfolders “Regular\_Delivery\_Equation” and “SAS\_Programs,” SAS program file “estim\_varib\_reg\_del\_time.sas.” For the SAS output, see Docket No. RM2015-7, Library Reference USPS-RM2015-7/1, subfolders “Regular\_Delivery\_Equation” and “SAS\_Output,” SAS output file “estim\_varib\_reg\_del\_time.lst.” The Postal Service calculates the overall average delivered volume as a sum of the volume means for four mail components. See Library Reference USPS-RM2020-7-1, folder “Calculating Updated Variabilities,” Excel file “Calculating Means Based upon FY 2019 Data.xlsx,” cell C17.

The Commission concludes such consistency is maintained. First, CCCS is also a continuous and ongoing study of city carrier route days.<sup>29</sup> Second, similar to DOIS, the CCCS volume data include annual estimates of delivered letter and flat volume (by mail shape).<sup>30</sup> Third, the relationship between DOIS and CCCS is sufficiently stable over time because “a large portion of the volumes in both systems come from the same machine counts.” Response to CHIR No. 4, question 1.b. The Commission therefore agrees with the Public Representative who supports the proposed update of volume means with the CCCS data and states that “the two data sources [DOIS and CCCS have been] reliable substitutes for each other.” PR Comments at 14.

In Proposal Two, when the Postal Service updates volume means for each of the four letter and flat mail shapes, it modifies their proportions in the relevant total mail volume using the FY 2019 CCCS data.<sup>31</sup> Based on the new proportions, the Postal Service recalculates volume means for all four delivery variables while keeping the overall letter and flat average delivered volume the same as it was in the CCSTS dataset.<sup>32</sup>

The Commission finds the Postal Service’s approach reasonable. First, the Commission agrees with the Postal Service and the Public Representative that the CCCS is a reliable data source for volume proportions between different types of delivered mail and has a stable relationship with DOIS. Second, as correctly pointed out by the Public Representative, the proposed method for updating the volume means

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<sup>29</sup> Response to CHIR No. 4, question 1.b.; Docket No. ACR2019, Library Reference USPS-FY19-34, December 27, 2019, Preface at 1.

<sup>30</sup> Docket No. ACR2019, Library Reference USPS-FY19-34, Preface at 1, 29; Docket No. ACR2019, Library Reference USPS-FY19-32, December 27, 2019, folder “B Workpapers,” Excel file “CS06&7-Public-FY19.xlsx,” tab “Doc,” row 20, tab “Input DK,” columns E-G, J.

<sup>31</sup> See Library Reference USPS-RM2020-7-1, folder “Calculating Updated Variabilities,” Excel file “Calculating Means Based upon FY 2019 Data.xlsx.”

<sup>32</sup> Bradley Report at 8. For details see Library Reference USPS-RM2020-7-1, folder “Calculating Updated Variabilities,” Excel file “Calculating Means Based upon FY2019.” The Postal Service plans to apply the proposed methodology for updating the delivery variables volume means on the annual basis. Petition, Proposal Two at 1.

“does not alter the ZIP-day data underlying the [established city carrier regular] delivery model” estimated in Docket No. RM2015-7, and “does not alter the parameter estimates obtained from” this model. PR Comments at 10.

The current and the updated FY 2019 volume means are compared in Table VI-3.

**Table VI-3**  
**The CCSTS and CCCS Based Means for Letter and Flat Delivered Mail**  
**(in Million Pieces)**

Shape	FY 2013 CCSTS Means	FY 2019 CCCS Means
DPS Mail	30.60	33.21
Cased Mail	9.44	9.41
Sequenced Mail	4.90	3.13
FSS Mail	2.14	1.33
All	47.08	47.08

Source: Library Reference USPS-RM2020-7-1, folder “Calculating Updated Variabilities,” Excel file “Calculating Means Based upon FY2019;” Docket No. ACR2019, Library Reference USPS-FY19-32, folder “B Workpapers,” Excel file CS06&7-Public-FY19.xlsx, tab “7.0.8;” Docket No. RM2015-7, Library Reference USPS-RM2015-7/1, subfolders “Regular\_Delivery\_Equation” and “SAS\_Output,” SAS output file “estim\_varib\_reg\_del\_time.lst.”

#### D. Rationale for Not Updating the Mean for Customer Collection Volumes

The regular delivery time econometric model includes one customer collection volume variable (volume of mail collected from customer receptacles) among the explanatory variables.<sup>33</sup> In Proposal Two, the Postal Service proposes to annually update the volume means for four delivery volume variables, but it does not propose to update the volume mean for customer collection volumes, stating that “there are no recent data on volumes collected from customer receptacles” that would make it “possible to update this volume mean.” Bradley Report at 8, n.9.

The Postal Service indicates that it considered the CCCS as a data source for updating the volume mean for customer collection mail volumes, but rejected its use due to the associated uncertainties and potential injection of “unknown error into the

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<sup>33</sup> Bradley Report at 5; Response to CHIR No. 2, question 1.c. See *also* Order No. 2792 at 12.

analysis". Response to CHIR No. 4, question 1.b. The Postal Service identifies a number of specific issues, including a notable percentage of ZIP Codes with zero customer collection mail volumes, as well as potential problems with the accurate conversion of CCCS data from a route level to a ZIP Code level.<sup>34</sup> In addition, the Postal Service argues that the CCSTS collection volumes were obtained from a special study and that the relationship between these volume data and current CCCS collection volumes is unknown. Response to CHIR No. 4, question 1.b.

The Public Representative agrees that there is some merit to the Postal Service's approach, but he still argues that FY 2019 CCCS provides reliable data for also updating the collection volume mean. PR Comments at 2, 13-14. He proposes his own method for updating volume means, which is similar to the Postal Service method, but also includes the CCCS customer collection volumes in the calculation of the volume shares.<sup>35</sup> In responding to the Public Representative's comments, the Postal Service clarifies that the "the accuracy of CCCS was never a question." Postal Service Reply Comments at 9. The Postal Service explains that the main reason for not updating the collection volume mean was the inability to accurately link customer collection volume data from the old and the new data sources (the CCSTS special collection volume study and CCCS). *Id.*

The Commission agrees that the issues associated with converting customer collection volumes from the route level to the ZIP Code level, as well as a potential to have zero volumes for some ZIP Codes, would provide challenges in developing a reliable dataset for the new econometric model. See Order No. 4869 at 11. However, these issues should not prevent the Postal Service from using the aggregated customer collection volume number obtained from CCCS and reported in the Cost and Revenue

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<sup>34</sup> *Id.*, citing Docket No. PI2017-1, Responses of the United States Postal Service to Questions 1-5 of Chairman's Information Request, June 27, 2018, question 2.

<sup>35</sup> *Id.* at 11; Library Reference RM2020-7-PR-NP-1, subfolders "RM2020-7-PR-NP-LR-1" and "FSS Delivery Model and Means Calcs," Excel file "Means\_Sums\_Ratios.Final," tab "Relative Shares Calcs."

Analysis (CRA) to update the volume mean.<sup>36</sup> The Commission finds that the unknown relationship between the CCSTS and CCCS is a valid reason for not updating the volume mean for customer collection volumes.<sup>37</sup>

The Commission agrees with the Postal Service and the Public Representative that when the old and the new databases are consistent, the update of volume proportions is possible without the re-estimation of the econometric model.<sup>38</sup> Re-estimating volume proportions by combining volumes for four delivery variables and one collection variable, as suggested by the Public Representative, may bias the results of the calculations, as pointed out by the Postal Service. Postal Service Reply Comments at 11. Specifically, the Commission observes that in the Public Representative's modified formula for volume proportions, the total volume is the sum of the CCSTS collection volume mean obtained from the special study and the CCSTS four delivery volume means obtained from DOIS.<sup>39</sup> Although the current volumes for both the delivery variables and the customer collection variable that the Public Representative relies on all come from CCCS, the noted mismatch between the FY 2013 data sources for the delivery volume variables and the customer collection volume variable can easily make the estimated proportions inaccurate. For that reason, the Commission does not recommend updating the collection volume mean at this time.<sup>40</sup>

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<sup>36</sup> See Docket No. ACR2019, Library Reference USPS-FY19-32, subfolders "usps-fy19-32.files" and "B Workpapers," Excel file "CS06&7-Public-FY19.xlsx," tab "7.0.8," cell E38.

<sup>37</sup> Response to CHIR No. 4, question 1 b.; Postal Service Reply Comments at 2, 9-11.

<sup>38</sup> PR Comments at 10; Postal Service Reply Comments at 9.

<sup>39</sup> See Library Reference RM2020-7-PR-NP-1, subfolders "RM2020-7-PR-NP-LR-1" and "FSS Delivery Model and Means Calcs," Excel file "Means\_Sums\_Ratios.Final," tab "USPS & PR Calculate Means," cell D21.

<sup>40</sup> In the meantime, the Commission also does not support the Public Representative's suggestion to use the expanded dataset submitted in Docket No. PI2017-1 to update the mean volumes for all variables included in the city carrier regular delivery model. PR Comments at 19-20. The Commission is concerned that such an update will require the re-estimation of the overall econometric equation, the very matter currently pending before the Commission in Docket No. PI2017-1. See Order No. 4869.

It is also important to note that although Proposal Two does not include an update of the volume mean for customer collection volumes, it still results in the updated relevant variability due to the cross terms between the customer collection volume variable and DPS mail, cased mail, and FSS mail, respectively. Bradley Report at 13, n.12.

#### E. Updated Variabilities, Marginal Times, and Cost Impact

Table VI-4 provides a comparison of the regular delivery variabilities and marginal times for the regular delivery volume variables (by shape) and for the customer collection volume variable. Current variabilities and marginal times are estimated using the FY 2013 CCSTS volumes and new variabilities and marginal times are re-estimated using the FY 2019 CCCS volume proportions between four regular delivery volume variables.

**Table VI-4**  
**City Carrier Regular Delivery Variabilities and Marginal Times**

Shape	Variabilities			Marginal Times (Seconds)		
	Current (1)	New (2)	Change	Current (3)	New (4)	Change
DPS Mail	16.76%	17.23%	0.47%	2.07	1.94	-0.13
Cased Mail	6.99%	7.50%	0.51%	2.79	2.98	0.18
Sequenced Mail	3.38%	2.40%	-0.98%	2.61	2.87	0.26
FSS Mail	2.95%	1.85%	-1.10%	5.21	5.21	0.00
Collection Mail	5.41%	4.55%	-0.86%	5.75	4.80	-0.95

Source: (1) Docket No. ACR2019, Library Reference USPS-FY19-32, subfolders "usps-fy19-32.files" and "B Workpapers," Excel file "CS06&7-Public-FY19.xlsx," tab "Input LR New," cells D19-D23; (2) Library Reference USPS-RM2020-7-1, folder "Calculating Updated Unit Flats Costs," Excel file "CS06&7-Public-FY19.New.xlsx," cells D19-D23; (3) CCSTS Report at 79, Table 33, sub-title "Including FSS Dummy;" (4) Library Reference USPS-RM2020-7-1, folder "Calculating Updating Variabilities," SAS file "Calculate Variabilities With New Volume Proportions.lst"

Table VI-5 provides a detailed comparison for market dominant products and total aggregated competitive products between city carrier unit costs (including indirect costs) calculated based on the FY 2013 CCSTS volumes and those calculated based on the FY 2019 CCCS volume proportions as proposed by Proposal Two.<sup>41</sup>

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<sup>41</sup> The impact of Proposal Two on individual competitive products is presented in Library Reference USPS-RM2020-7-NP1, subfolders "Prop.2.Carrier.Update.NP1.Files" and "Non-Public Impact Analysis," Excel file "Calculate Unit Carrier Cost with New Variabilities.xlsx," tab "Per Piece."

**Table VI-5  
City Carrier Unit Costs Including Indirect Costs**

	Based on Volume Proportions from:		Change
	FY 2013 CCSTS	FY 2019 CCCS	
<b>First Class Mail</b>			
Single-Piece Letters	\$0.099	\$0.094	-\$0.005
Single-Piece Cards	\$0.118	\$0.113	-\$0.005
Presort Letters	\$0.040	\$0.041	\$0.001
Presort Cards	\$0.035	\$0.035	\$0.001
Single-Piece Flats	\$0.229	\$0.222	-\$0.008
Presort Flats	\$0.180	\$0.177	-\$0.003
<b>USPS Marketing Mail</b>			
High Density and Saturation Letters	\$0.042	\$0.041	-\$0.001
High Density and Saturation Flats/Parcels	\$0.067	\$0.055	-\$0.012
Every Door Direct Mail – Retail	\$0.059	\$0.049	-\$0.009
Carrier Route	\$0.120	\$0.013	-\$0.007
Letters	\$0.041	\$0.041	\$0.001
Flats	\$0.174	\$0.168	-\$0.005
Parcels	\$0.385	\$0.383	-\$0.001
<b>Periodicals</b>	\$0.109	\$0.104	-\$0.005
<b>Package Services</b>			
Bound Printed Matter Flats	\$0.138	\$0.136	-\$0.003
Bound Printed Matter Parcels	\$0.271	\$0.271	\$0.000
Media/Library Mail	\$0.321	\$0.318	-\$0.004
<b>Total Domestic Competitive Mail and Services</b>	\$0.363	\$0.361	-\$0.002
<b>Total International Mail and Services</b>	\$1.024	\$1.025	\$0.000

Source: Bradley Report at 18, Table 8; Library Reference USPS-RM2020-7-NP1, subfolders "Prop.2.Carrier.Update.NP1.Files" and "Non-Public Impact Analysis," Excel file "Calculate Unit Carrier Cost With New Variabiltiues.xlsx," tab "Per Piece," columns O, P.

## F. Conclusion

The Commission evaluates proposed changes to analytical principles to assess whether they “improve the quality, accuracy, or completeness of the data or analysis of data” contained in the Postal Service’s periodic reports. 39 C.F.R. § 3050.11(a). The Commission concludes that the changes presented in Proposal Two improve the accuracy of data, and it therefore approves the proposed changes.

Proposal Two will improve the accuracy of unit volume variable costs by annually updating volume means and re-calculating the city carrier regular delivery street time variabilities to reflect current volume proportions among delivered mail components. The Commission agrees that the city carrier regular delivery street time variabilities should be updated to reflect changes in relative volumes.

A comprehensive solution would be a re-estimation of the city carrier regular delivery street time econometric model. Such a complex re-estimation, is currently under investigation in Docket No. PI2017-1. As an interim alternative, the Postal Service proposes a methodology that applies the CCCS volume proportions to annually update the city carrier regular delivery volume means and adjust the regular delivery street time variabilities used in the established delivery cost model.

The Commission agrees with the Postal Service that the CCCS is a reliable data source for volume proportions between different types of delivered mail, and that the CCCS has a stable relationship with DOIS, which was a data source in the FY 2013 city carrier regular delivery street time econometrics model. The Commission finds that the Postal Service’s methodology is a reasonable interim solution that adjusts the variabilities to reflect changes in volume proportions and that the accuracy of unit delivery costs will be improved. The Commission also finds that the annual updates of city carrier regular delivery mail volume means will result in more accurate regular delivery street time variabilities, and will produce more accurate estimation of city carrier volume variable costs until a new city carrier street time model is developed.

The Commission concludes that the accuracy of unit volume variable costs will be improved by re-calculating the variabilities to reflect current volume proportions and

that the methodology approved by this Order should be used to update those variabilities for future changes in volume proportions.

VII. ORDERING PARAGRAPH

*It is ordered:*

1. For purposes of periodic reporting, the Commission approves Proposal Two which, for the reasons described in this Order, will improve the accuracy of city carrier street time cost attribution.

By the Commission.

Erica A. Barker  
Secretary